

126

# JOURNAL *of* FORESTRY



Vol. XXX



Published by the  
**SOCIETY of AMERICAN FORESTERS**

Single Copy Sixty Five Cents

Four Dollars per Year

# JOURNAL of FORESTRY

OFFICIAL ORGAN OF THE SOCIETY OF AMERICAN FORESTERS

A professional journal devoted to all branches of forestry

---

## EDITORIAL STAFF

*Editor-in-Chief*

EMANUEL FRITZ, 231 Giannini Hall, Berkeley, California

*Associate Editors*

J. H. HATTON,

*Wild Life and Recreation,*  
United States Forest Service, Denver,  
Colorado

R. C. HAWLEY,

*Dendrology, Silvics, and Silviculture,*  
Yale School of Forestry,  
New Haven, Connecticut

P. A. HERBERT,

*Forest Economics and Policy,*  
Forestry Dept., Michigan State College,  
E. Lansing, Michigan

ARTHUR KOEHLER,

*Forest Utilization and Wood Technology,*  
Forest Products Laboratory, Madison,  
Wisconsin

W. C. LOWDERMILK,

*Forest Influences,*  
California Forest Experiment Station,  
Berkeley, California

G. W. PEAVY,

*Forest Protection and Administration,*  
School of Forestry, Oregon State Ag-  
ricultural College, Corvallis, Oregon

HENRY SCHMITZ,

*Forest Education and Reviews,*  
Division of Forestry, University of  
Minnesota, University Farm, St.  
Paul, Minnesota

W. G. WRIGHT,

*Forest Mensuration and Management,*  
Price Brothers & Company, Ltd.,  
Quebec, Canada

---

Entered as second-class matter at the post-office at Washington, D. C.

Acceptance for mailing at special rate of postage provided for in the Act of February 28, 1925, em-  
bodied in paragraph 4, Section 412, P. L. and R. authorized November 10, 1927.

Office of Publication, Room 810, Hill Bldg., 839 17th St., N. W., Washington, D. C.

Editorial Office, 231 Giannini Hall, Berkeley, California—Manuscripts intended for publication should  
be sent to Emanuel Fritz, Editor-in-Chief, at this address, or to any member of the Editorial Staff.

The JOURNAL appears eight times a year monthly—with the exception of June, July, August, and Sep-  
tember.

The pages of the JOURNAL are open to members and non-members of the Society.

Missing numbers will be replaced without charge, provided claim is made within thirty days after  
date of the following issue.

Subscriptions, advertising, and other business matters should be sent to the JOURNAL OF FORESTRY,  
Room 810, Hill Bldg., 839 17th St., N. W., Washington, D. C.

---

---



# CONTENTS

	PAGE
Editorial. New York Increases Its Lead in State Forestry.....	1
The Relation of Certain Forest Conditions to the Quality and Value of Second-Growth Loblolly Pine Lumber .....	4
By Benson H. Paul .....	
The Effect of Black Locust on Soil Nitrogen and Growth of Catalpa.....	22
By Arthur C. McIntyre and C. D. Jeffries .....	
Variation in Characteristics of Black Locust Seeds From Two Regions .....	29
By C. Leslie Burton .....	
Relation of Forest Site Quality to Number of Plant Individuals Per Unit Area .....	34
By H. J. Lutz .....	
A New Principle in Seed Collecting for Norway Pine—A Criticism.....	39
By F. I. Righter .....	
Methods of Determining Increment Over Large Areas .....	47
By Roy B. Thomson .....	
Forest Fire Protection in the Southern Portion of West Virginia .....	58
By C. H. Tracy .....	
A Successful Method of Power Felling .....	62
By William H. Wirt .....	
Spruce-Balsam Forest Yields in Nova Scotia and Cape Breton Island.....	65
By R. S. Johnson .....	
Timber Types in the Kiamichi and Ozark Regions.....	69
By Karl M. Stoller .....	
Forest Vegetation in Southeastern Nebraska .....	72
By A. E. Holch .....	
Woods and Forest Botany at Field Museum of Natural History.....	75
By L. Williams .....	
Forestry in the Museum of Science and Industry.....	83
By Helmuth Bay .....	
Editorial. Permissive Self Help for the Lumber Industry.....	127
More Practical Aid and Information: The Sine Qua Non for Private Forestry Development in the Southern Pine Region.....	130
By Ralph C. Bryant .....	
Comments by A. J. Streinz .....	134
Comments by A. E. Wackerman .....	134
The Small Mill—Its Awakening and Development.....	137
By A. S. Boisfontaine .....	
Comments by Robert Moore .....	142
The Governmental Organization and the Financing of Forest Communities in the South.....	145
By P. A. Herbert .....	
Comments by R. L. Thompson .....	151
Wisconsin's County Forest Program .....	155
By F. G. Wilson .....	
Comments by Ronald B. Craig .....	159

	PAGE
Some Aspects of the Forest Planting Situation in the Northeast.....	162
By C. Edward Behre	
Felling, Girdling, and Poisoning Undesirable Trees in Forest Stands.....	169
By A. L. MacKinney and C. F. Korstian	
Recent Mechanical and Other Innovations in National Forest Fire Control.....	178
By Roy Headley	
Opportunities in Park Work.....	187
By J. D. Coffman	
Opportunities for Foresters with Recreational Training in National Forest Work.....	190
By L. A. Barrett	
Some Impressions of European Forestry.....	191
By Edward C. M. Richards	
American Forest Literature from a Bibliography Point of View.....	197
By James L. Averell	
Drowned Forests.....	200
By Warren F. Hale	
Some Problems in Forest Education.....	203
By Henry Schmitz	
Editorial. Forestry in the South.....	253
Address of the President.....	255
By Paul G. Redington	
Address of the President-Elect.....	263
By C. M. Granger	
The Forest Survey in the Douglas Fir Region.....	264
By H. J. Andrews	
The Land Use Problems in the South.....	276
By Carl Williams	
Financial Aspects of Growing Pine in the South.....	284
By E. A. Ziegler and W. E. Bond	
Comments by Harry Lee Baker.....	297
Comments by C. F. Korstian.....	299
Some Financial Aspects of Coöperative Forest Protection.....	301
By Fred Morrell	
Forestry at Urania, Louisiana.....	310
By Henry Hardtner	
Forestry at Elizabeth, Louisiana.....	312
By B. F. Smith	
Comments by G. D. Marckworth.....	316
The Rôle of Forest Products in Railroad Revenue.....	318
By S. R. Young	
Forestry and the Hardwood-Using Industries.....	323
By Donald R. Brewster	
The National Aspects of Soil Erosion and Floods and Their Control by Vegetative Cover.....	328
By Scott Leavitt	
Aerial Forest Mapping.....	336
By Stuart Moir	



Editorial. Ponderosa Pine, Douglasfir and Balsam Firs—Let's Settle Their Nomenclature.....	379
Transpiration Capacity of Coniferous Seedlings and the Problem of Heat Injury..... By Jacob Roeser, Jr.	381
The Calcium Content of Connecticut Forest Litter..... By Walter Urban Garstka	396
A Comparison of the Results Obtained with Forest-Pulled and Nursery-Grown Planting Stock in Northern Minnesota..... By T. Schantz-Hansen	406
Establishment and Survival of Yellow Poplar Following a Clear Cutting in the Southern Appalachians..... By I. H. Sims	409
The Use of Paper Mulch in the Forest Nursery and Field Plantations..... By P. W. Robbins	415
Does Light Burning Stimulate Aspen Suckers? II..... By Hardy L. Shirley	419
The Drying Rate of Hardwood-Forest Leaves..... By M. E. Dunlap	421
What Is the Growth Per Cent of American Forests?..... By H. F. Morey	424
The Suitability of Reineke's Planimeter Method for Volume Determinations of Delta Hardwood Species..... By Robert K. Winters and Philip R. Wheeler	429
Sampling Douglas Fir Reproduction Stands by the Stocked-Quadrat Method..... By R. W. Cowlin	437
Recent Developments in the Lumber Industry..... By Wilson Compton	440
Forest Cover Types of the Eastern United States..... Committee Report	451
Editorial. Critical Times Ahead for Forestry.....	537
Government Reorganization..... By Henry S. Graves	539
Conservation, and the Department of the Interior..... By H. H. Chapman	544
Camps for the Unemployed in the Forests of California..... By R. L. Deering	554
Seattle's Watershed Controversy..... By B. E. Hoffman	558
Forest Management on the Delaware and Hudson Adirondack Forest..... By E. A. Sterling	569
Comparative Timber-Yields..... By I. T. Haig	575
The Brown-Spot Needle Blight of Longleaf Pine Seedlings..... By Paul V. Siggers	579
Some Relations of Fire to Longleaf Pine..... By Austin Cary	594

	PAGE
Some Further Relations of Fire to Longleaf Pine.....	602
By H. H. Chapman	
Relation of Fires to Water Conservation in Los Angeles County.....	605
By E. C. Eaton	
The Effect of Forest Fires on Tourist Travel.....	608
By T. L. Stanley	
Some Preliminary Studies Toward the Development of a State Forest Fire Protection Policy....	616
By Burnett Sanford	
Forest Products Research .....	620
By Frank P. Cartwright	
Editorial. Leaders Will Pass, But Their Work Must Continue.....	663
James William Toumey.....	665
By Henry S. Graves	
The Improvement of Composition of Stands in New England.....	670
Committee Report	
Chemical Treatments to Shorten the Rest Periods of Red and Black Oak Acorns .....	674
By Carl G. Deuber	
Planting Experiments with Ponderosa Pine in Northern Minnesota.....	680
By T. Schantz-Hansen	
Improving the Quality of Second-Growth Douglas Fir.....	682
By Benson H. Paul	
Preliminary Report on the Relative Susceptibility of Sugar Pine and Western White Pine to Blister Rust.....	687
By H. G. Lachmund and J. R. Hansbrough	
A Precision Dendrometer.....	692
By L. H. Reineke	
Are Foresters Giving Game Management Sufficient Consideration in Regions of Concentrated Population? .....	700
By A. E. Moss	
The New Approach in Extension Forestry.....	704
By W. K. Williams	
Publicity: Forestry's Neglected Handmaiden.....	709
By Henry E. Clepper	
The Chemical Control of Lumber and Log Staining and Molding Fungi.....	714
By R. M. Lindgren, T. C. Scheffer and A. D. Chapman	
Pole Utilization in New England.....	722
By George A. Garratt	
Woods and Mill Utilization in Northern Idaho and Western Montana .....	734
By I. V. Anderson	
Breakage and Defect Volume Losses in a Ponderosa Pine Stand.....	741
By Clark Miles	
Editorial. Forestry at the Cross Roads.....	789
Technical Forest Practices in New York Reforestation Work.....	791
Committee Report	
Control of the White Pine Weevil.....	800
Committee Report	



	PAGE
Change in Form of Red Spruce After Logging and of Northern White Pine After Thinning..... By C. Edward Behre	805
Tree Physiology..... By Carl G. Deuber	811
Converting Factors for Some Stacked Cords..... By G. Luther Schnur	814
Northern White Pine in the Southern Appalachians..... By J. A. Cope	821
The Effect of the Concentration of the Culture Solution on Seedlings of Ponderosa Pine..... By Joseph Howell, Jr.	829
Quality Versus Size as an Index of a Profitable Tree: Loblolly Pine..... By Benson H. Paul	831
Forest Cover in Relation to Upland Game Bird Management..... By Gardiner Bump	834
An Example of White Pine Reproduction on Burned Lands in Northeastern Pennsylvania..... By O. M. Wood	838
New Uses of Wood and Their Influence Upon Forestry Practice..... By Reginald T. Titus	846
The New-Use Mirage..... By Charles W. Boyce	853
Recent Progress of the Norwegian Agricultural and Forestry Credit Society: Significance for American Farm Forestry..... By Bernard Frank	856
Forest Economics: With Special Reference to Stumpage, Log, and Lumber Prices..... By Henry B. Steer	860
Sawmill Waste and Its Utilization in Scandinavia and the Pacific Northwest..... By J. Elton Lodewick	867
Editorial. A Change in System of Taxing Old-Growth Sorely Needed.....	915
Thinning Jack Pine in the Nebraska Sand Hills..... By J. Roeser, Jr.	918
Hastening Germination of Basswood Seeds..... By J. Nelson Spaeth	925
The Roots of a Jack Pine Tree..... By E. G. Cheyney	929
Some Diameter Distributions in Forest Stands of Northwestern Pennsylvania..... By A. F. Hough	933
The Development of Seedlings of Ponderosa Pine in Relation to Soil Types..... By Joseph Howell, Jr.	944
European Game Management as Suggestive of American Procedure..... By Edward C. M. Richards	948
Impressions of Forestry in England..... By Barrington Moore	951
Man's Destructive Use of the Earth's Resources..... By Adriano A. Michieli	958

	PAGE
Los Angeles County Forestry Activities.....	972
By George H. Cecil	
The Regulated Cutting of California Red Fir for Christmas Trees.....	977
By Arnold N. Weber	
A Portable Cordwood Chute.....	980
By Henry H. Tryon	
Visibility Maps Constructed with the Slide-Rule.....	983
By Rudolph Stahelin	
A Method for Determining the Economic Value of a Forest Road.....	988
By J. P. Martin and T. W. Norcross	
Forest Lands as Investments for Insurance Companies.....	1004
By P. A. Herbert	
A Method of Studying Growth Exemplified by Adirondack Spruce and Fir.....	1008
By Harry D. Switzer	
BRIEFER ARTICLES AND NOTES.....	90, 209, 340, 499, 623, 746, 871, 1012
REVIEWS .....	99, 232, 345, 511, 633, 760, 883, 1024
CORRESPONDENCE .....	108, 1029
SOCIETY AFFAIRS.....	115, 246, 351, 522, 647, 773, 899, 1031
SOCIETY OFFICERS.....	125, 251, 375, 531, 661, 787, 913, 1039